

Salt Lake Avian Collision Survey (SLACS) 2022 project summary

PROJECT OVERVIEW

Approximately two-thirds of migratory birds travel at night. Light pollution can draw these birds into bright cities. Finding themselves in a dense urban environment and unable to perceive most types of glass, many of these birds collide with buildings and structures before finding their way back out of the city. In 2017, Tracy Aviary launched a community science study – the Salt Lake Avian Collision Survey (SLACS) - to document bird-building collisions during spring and fall migration in Salt Lake City, UT.

In spring (April – May) and fall (September – October) 2022, 18 community scientists and Tracy Aviary staff members conducted 200 collision surveys.

DOCUMENTED COLLISIONS

We found 11 birds representing 9 species during spring 2022 and 31 birds representing 17 species during fall 2022, for a total of 42 birds this year. The spring season average was 0.11 birds per survey and the fall season average was 0.30 birds per survey. All birds that were collected will be donated to the Natural History Museum of Utah for future research and potential use as exhibit specimens.

BIRD SPECIES FOUND IN 2022

- 2 Yellow Warblers
- 2 Mourning Doves
- 2 Chipping Sparrows
- 2 Orange-crowned Warblers
- 2 Calliope Hummingbirds
- 2 Rock Pigeons
- 1 MacGillivray's Warbler
- 1 Black-chinned
- Hummingbird
- 1 Dark-eyed Junco
- 1 House Finch
- 1 Brewer's Sparrow
- 5 Passerine sp.
- 3 Hummingbird sp.

- 1 Broad-tailed Hummingbird
- 1 Williamson's Sapsucker*
- 1 Western Wood-pewee
- 1 White-crowned Sparrow
- 1 Western Tanager
- 1 Grasshopper Sparrow
- 1 Mountain Chickadee
- 1 Nashville Warbler
- 1 Song Sparrow
- 1 Townsend's Solitaire*
- 2 Warbler sp.
- 3 Sparrow sp.
- 1 Duck sp.
- 1 Flycatcher sp.

^{*} This species has not previously been documented by SLACS



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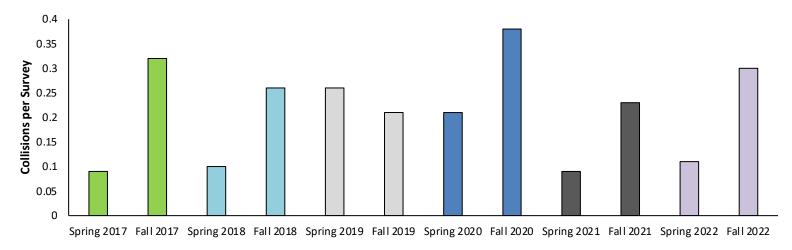
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RESULTS from 2017 - 2022

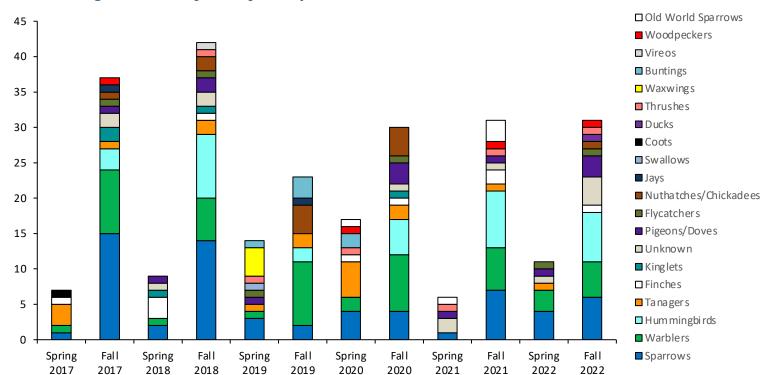
Since the project began in 2017, 61 volunteers have conducted over 1,090 surveys. We have documented 258 bird-window collisions of 50 different bird species. The species we have found most often are Western Tanagers, Brewer's Sparrows, Dark-eyed Juncos, Orange-crowned Warblers, and Black-chinned Hummingbirds.

COMPARISON TO PAST YEARS OF SLACS

Bird-Building Collisions Found Per Survey



Bird-Building Collisions By Family Group



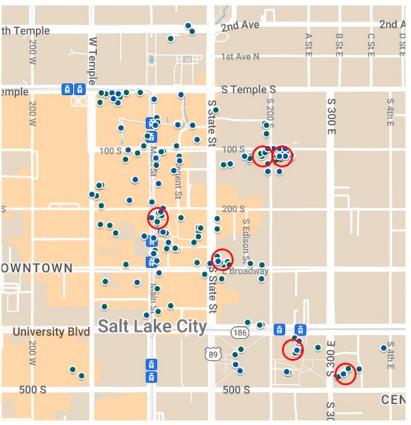




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COLLISION LOCATIONS AND HOT SPOTS



51% all collisions were at **6** buildings:

- 69 birds @ 101 200E (101 Tower)
- 14 birds@ 201 Main St (One Utah Center)
- 10 birds @ 111 E Broadway (Ken Garff Tower)
- 10 birds @ 102 200E (102 Tower)
- 9 birds @ 210 E 400 S (Public Library)
- 9 birds @ 475 300 E (Public Safety Building)



NEXT STEPS

We are working on several next steps to ensure the information we collect helps prevent window collisions and ultimately makes our city safer for birds. Some of these steps include:

- Building Measurements: We take measurements of all buildings where we
 have documented window collisions, and an equal number of randomly
 selected buildings, so we can identify especially dangerous building
 characteristics. We will be completing surveys for 2022 collisions in the next
 few weeks, and will add this information to an ongoing analysis
- Lights Out Salt Lake: We continue to promote the Lights Out Salt Lake
 initiative each spring and fall, which encourages buildings, businesses, and
 private residences to turn out their lights at night during peak migration to
 decrease the number of nocturnal migrants that are drawn into our city.
- Bird-Window Collision Working Group: We are working with Great Salt Lake Audubon's Bird-Window Collision working group on a number of initiatives, including outreach presentations, meetings with the Salt Lake City planners office, directly contacting dangerous building to encourage them to mitigate their windows, and working with local architects to encourage birdfriendly practices in the design phase of a project.

